DRAFT
CALFED Role and Policy
With Respect to San Joaquin River Water Quality Problems
December 31, 1996

The scope of the CALFED Water Quality Program includes water quality problems in the San Joaquin River and its tributaries which directly affect, or have the capacity to directly affect, the quality of Sacramento- San Joaquin Bay-Delta Estuary waters. Water quality parameters of concern in the San Joaquin River, and Delta Estuary are shown in Table 1, attached.

Sources of water quality problems in the San Joaquin River and its tributaries include:

- agricultural tail water, which may contribute salts, nutrients, pesticide residues, pathogens, and turbidity;
- subsurface agricultural drainage that may contribute salts, nutrients, and selenium;
- storm inflows that may ~~bring in~~ contribute turbidity, pathogens, organic carbon, nutrients, pesticide, and ~~other~~ chemical residues.
- municipal and industrial discharges that may contribute salts, metals, pathogens, and chemical residues;
- ~~A~~a cid drainage from old mines which introduce metals such as zinc, cadmium, copper, and ~~chromium~~.; and
- soil erosion of natural and human origin that can add turbidity.

Probably the most ~~important~~ significant source of water quality degradation in the San Joaquin River system is agricultural drainage ~~which can~~, during ~~low flow~~ periods, comprise the majority of San Joaquin River flow. Water quality experts familiar with the problems of the San Joaquin River watershed generally agree that any long-term solution to these problems must include some mechanism for ~~removing salts from~~ the system. Otherwise, management of the quality of San Joaquin River waters must primarily rely on distributing salt loads in the river system. ~~Other~~ temporary solutions include ~~impounding~~ salt laden drainage waters and similar measures ~~that have the effect of~~ to temporarily reducing discharges to the San Joaquin River, ~~but not~~ without affecting long term salt balance in the Valley.

CALFED recognizes that the San Joaquin River has a pronounced effect on the quality ~~of the waters~~ of the Sacramento-San Joaquin Delta Estuary; ~~and, It is~~ also recognized that, ultimately, a complete solution to the problems of San Joaquin River water quality will require mechanisms to permanently reduce the load ~~of salts~~ coming into the river from agricultural activities. At the same time, it is also recognized that the water quality problems of the San Joaquin River have

D-044119

may want to mention Nigel Quinn's on-going pilot projects here.

been under study for many years, and that the San Joaquin Valley Drainage Improvement Program (SJVDIP) is a multi-agency federal/state/local entity that was established for the purpose of solving salt and related toxic element management problems of the San Joaquin River system. CALFED will rely on the SJVDIP to provide the overall direction for long term solutions of these problems.

It is the intent of CALFED to act, in full coordination with the SJVDIP, to facilitate activities directed to attacking water quality problems from the sources listed above, from an overall watershed approach. In determining ~~its~~ priorities for action, CALFED will ~~make a~~ determination ~~whether that~~ proposed activities are consistent with CALFED Solution Principles relating to fairness, solution durability, and equity. In addition, the following will be considered:

- ~~The~~ degree to which the proposed activity will ~~beneficially affect the quality of~~ Sacramento-San Joaquin Delta Estuary waters in comparison to the cost of implementing the solution;

- whether proposed activities related to water quality are consistent with CALFED objectives related to ecological, water supply, ~~supply~~ reliability, and conveyance and storage ~~issues~~;

- consistency with the San Joaquin Valley Drainage Improvement Program;

- the extent to which the problem and proposed solutions have been investigated, ~~and~~ technically documented, and ~~the~~ demonstrated probability that the proposed solution will be successful;

- whether there are prospective local/state/federal participants or partnerships ~~for~~ problem resolution, and whether a suitable management infrastructure exists;

To formulate detailed policies, plans and actions, CALFED staff will work with San Joaquin Valley stakeholders, especially the staff of the San Joaquin Valley Drainage Improvement Program, and will undertake an active program of outreach to assure the interests of all stakeholders are represented. .

0101SJR

TABLE 1

CALFED Bay-Delta Water Quality Parameters of Concern

Cadmium	Dissolved Oxygen
Copper	Salinity (TDS, EC)
Mercury	Temperature
Selenium	Turbidity
Zinc	Unknown Toxicity
Carbofuran	Bromide
Chlordane	Nutrients (Nitrate)
Chlorpyrifos	Pathogens
DDT	TOC
Diazinon	Viruses
PCBs	Boron
Toxaphene	Chloride
Ammonia	pH (Alkalinity)
Temperature	SAR